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Friday's Feature

By

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Golden webs are an indicator of a large, beneficial spider

Spiders—just the word strikes fear in the heart of many people around the world. There are at least 37,000 known species of spiders and approximately 700 species live in Florida.

Many gardeners know that spiders can be beneficial creatures in our gardens and landscapes because they are effective predators of pest insects. All spiders are predators and, as a group, eat more insects than birds. It's their catching behaviors which are different.

One type of catching mechanism is the web. And, along the Gulf Coast, we frequently “run into” the web of one of the largest orb weavers, the golden silk spider. The large golden web of this species makes a sticky trap for hikers and hunters, frequently face first. The webs are usually made in forest areas along trails and edges of dense forest but can be found in residential landscapes.

The golden silk spider, *Nephila clavipes*, is known locally as the banana spider. It is a large orange and brown spider with conspicuous tufts of hairs on its legs.

There is little danger of getting bitten from an encounter with the golden silk spider. This spider will bite only if held or pinched, and the bite itself will produce only localized pain with a slight redness, which quickly goes away.

The golden silk spider typically feeds on small flying insects including flies, grasshoppers, wasps, bees, and small butterflies and moths. This spider bites its prey first, and then performs the immobilization wrapping.

The female spiders are significantly larger than males. Their bodies are typically about an inch long but their long legs make them look much larger. The female color pattern consists of a silvery front body section, yellow spots on a dull to tan cylindrical body and brown and orange banded legs. The hair brushes, known as gaiters, make this spider one of the most easily recognized.

The males are slender spiders and are about ¼ inch in length. They are inconspicuously dark brown, and would often go unnoticed if not seen in the webs of females. Males occupy a hub position, which is an area two inches above the female. From this position they guard the female.

The golden silk spider usually has one generation per year. Adult males are present from July to September, with most females maturing in August. Mature females are found late into the fall, when they make at least two large eggsacs consisting of several hundred eggs surrounded by a basket of curly yellow silk.



Golden silk spiders construct a strong web for protection from predators and the capture of prey. They are placed to take advantage of insect flight paths. This orb weaving spider puts a special design in the center of the web, with a thicker silk. This is called a stabilimentum. It gives off ultra-violet rays which attract insects, allow birds to see the web and often hides the spider in the middle of the web.

The dragline thread (the silk) is currently being tested for possible industrial uses. On a weight basis, the dragline in golden silk spiders surpasses the strength of “Kevlar,” a fiber used in bullet-proof vests. For more information on the golden silk spider see <http://edis.ifas.ufl.edu/IN467>.

While this spider may seem menacing because of its size, it really is a benefit to the garden and the gardener. Just keep your eyes open and try not to get caught up in its golden web.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names, if used in this article, is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others. For additional information about all of the county extension services and other articles of interest go to: <http://www.santarosa.fl.gov/extension>